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IN THE CLAIMS:

Please amend the pending claims as shown in the following claim listing.

CLAIM LISTING:

Claims 1-3 (Cancelled – allowed in parent application)

4. (Currently Amended) A method for treating interproximal and subgingival sites in the oral cavity with a coated monofilament dental tape comprising flossing said sites with a coated monofilament dental tape having a substantive coating, wherein said coating:

contains a crystal control substance,

is saliva soluble,

is substantially crystal-free,

and comprises from between about 20% and about 120% by weight of said tape,
and has a flake value of less than about 20 and a release value of about 90 to 100,
wherein at least about 90 percent of the coating is released during flossing.

5. (Previously Presented) The method of Claim 4, wherein said tape coating further comprises an active ingredient selected from the group consisting of stannous fluoride, potassium nitrate, triclosan, chlorhexidine, cetylpyridinium chloride, domaphen bromide, metronidazole, doxycycline, aspirin, other non-steroidal anti-inflammatory drugs and mixtures thereof.

6. (Currently Amended) A method for treating interproximal and subgingival sites in the oral cavity for the purposes of mitigating, curing or otherwise affecting systemic diseases which are caused or exacerbated by poor oral health such as

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heart disease, diabetes, tobacco-use related disease, low-birth weight babies, immuno-compromised patients,

said method comprising flossing said sites with a coated monofilament dental tape having a substantive coating, wherein said coating contains an active ingredient selected from the group consisting of stannous fluoride, potassium nitrate, triclosan, chlorhexidine, cetylpyridinium chloride, domaphen bromide, metronidazole, doxycycline, aspirin, other non-steroidal anti-inflammatory drugs (NSAIDS) and mixtures thereof; and

wherein said coating:

contains a crystal control substance,

is saliva soluble,

is substantially crystal-free,

and comprises from between about 20% and about 120% by weight of said tape,
and has a flake value of less than about 20 and a release value of about 90 to 100, and
wherein at least about 90 percent of the coating is released during flossing.

7. (Currently Amended) A method for physically removing subgingival biofilms from interproximal and subgingival sites in the oral cavity with a coated monofilament dental tape comprising flossing said sites with a coated monofilament dental tape having a substantive coating, wherein said coating:

contains a crystal control substance

is saliva soluble

is substantially crystal-free

comprises from between about 20% and about 120% by weight of said tape has a flake value of less than about 20 and a release value of about 90 to 100, and wherein at least about 90 percent of the coating is released during flossing.

Claims 8-12 (Cancelled – allowed in parent application)

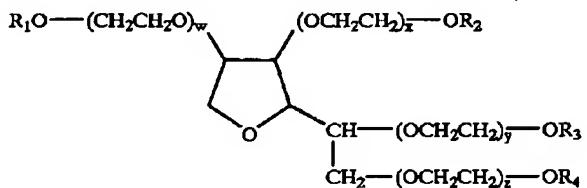
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13. (Previously Presented) A substantive coating for monofilament dental tape comprising:

at least one crystal control substance; and

an effective amount of at least one biologically active ingredient, wherein the coating is saliva-soluble and comprises between about 20% and about 120% by weight of the tape and has a flake value of less than about 20 and a release value of about 90 to 100.

14. (Previously Presented) The substantive coating for monofilament dental tape of claim 13, wherein the crystal control substance is selected from the group consisting of long chain fatty alcohols or mixtures thereof and liquid surfactants having the standard formula:



wherein R₁ to R₄ represent H or aliphatic acyl groups having from 10 to 30 carbon atoms.

15. (Previously Presented) The substantive coating for monofilament dental tape of claim 14, wherein the sum of w, x, y, and z is from between about 20 and about 80.

16. (Currently Amended) The substantive coating for monofilament dental tape of claim 13, wherein the crystal control substance is a surfactant selected from the group consisting of TWEEN® 80 (POE sorbitan fatty acid ester), SPAN 60® (sorbitan monostearate), EMSORB® 2726 (polyethyleneglycol (PEG)-40 diisostearate), and

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POLOXAMER 407 (a nonionic surfactant block copolymer of ethylene oxide and propylene oxide).

17. (Previously Presented) The substantive coating for monofilament dental tape of claim 13, wherein the crystal control substance comprises an esterified, polyethylene glycol (PEG-) based surfactant.

18. (Previously Presented) The substantive coating for monofilament dental tape of claim 13, wherein the crystal control substance is a polyethylene glycol sorbitan dialiphatic ester.

19. (Previously Presented) The substantive coating for monofilament dental tape of claim 14, wherein the long chain fatty alcohol has the standard formula:



wherein R represents a long chain alkyl group having from 10 to 30 carbon atoms.

20. (Previously Presented) The substantive coating for monofilament dental tape of claim 14, wherein the long chain fatty alcohol is selected from the group consisting of 1-tetradecanol, 1-eicosanol, 1-octacosanol, 1-pentadecanol, 1-heneicosanol, 1-nonacosanol, 1-hexadecanol, 1-tricosanol, 1-triacontanol, and 1-tetracosanol.

21. (Previously Presented) The substantive coating for monofilament dental tape of claim 14, wherein the long chain fatty alcohol is present in its natural isomeric form.

22. (Previously Presented) The substantive coating for monofilament dental

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tape of claim 13, wherein the at least one biologically active ingredient is selected from the group consisting of antimicrobial, anti-tartar, anti-plaque, whitening, cleaning, desensitizing, antibiotic, anti-inflammatory, anti-gingivitis ingredients, prostaglandin (PGE₂), and C-reactive protein control substances.

23. (Previously Presented) The substantive coating for monofilament dental tape of claim 22, wherein the antimicrobial substance is selected from the group consisting of chlorhexidine, cetylpyridinium chloride, domaphen bromide, triclosan, metronidazole, and mixtures thereof.

24. (Currently Amended) The substantive coating for monofilament dental tape of claim 22, wherein the anti-plaque substance is selected from the group consisting of emulsions of polydimethylsiloxanes and block copolymers of ethylene oxide and propylene oxide including MICRODENT® and ULTRAMULSION® TM.

25. (Previously Presented) The substantive coating for monofilament dental tape of claim 13, further comprising a wax.

26. (Previously Presented) The substantive coating for monofilament dental tape of claim 25, wherein the wax is selected from the group consisting of paraffin waxes, microcrystalline waxes, petroleum waxes, and natural waxes.

27. (Previously Presented) The substantive coating for monofilament dental tape of claim 25, wherein the wax is substantially solid at room temperature and comprises a C₁₆ to C₅₀ hydrocarbon.

28. (Previously Presented) The substantive coating for monofilament dental tape of claim 13, further comprising a sweetening agent.

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29. (Previously Presented) The substantive coating for monofilament dental tape of claim 28, wherein the sweetener comprises saccharin.

30. (Previously Presented) The substantive coating for monofilament dental tape of claim 13, further comprising a flavoring agent.

31. (Previously Presented) The substantive coating for monofilament dental tape of claim 30, wherein the flavoring agent is spicemint flavored or vanilla mint flavored.

32. (Previously Presented) The substantive coating for monofilament dental tape of claim 13, further comprising an abrasive agent.

33. (Previously Presented) Monofilament dental tape coated with a substantive coating, the coating comprising:

at least one crystal control substance; and

an effective amount of at least one biologically active ingredient, wherein the coating is saliva-soluble and comprises between about 20% and about 120% by weight of the tape and has a flake value of less than about 20 and a release value of about 90 to 100.

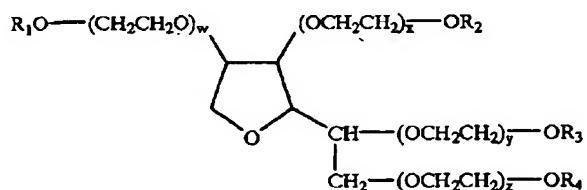
34. (Currently Amended) The coated monofilament dental tape of claim 33, wherein the monofilament dental tape comprises an elastomer, polytetrafluoroethylene including TEFLON®, a bicomponent, or a polymer.

35. (Previously Presented) The coated monofilament dental tape of claim 33, wherein the monofilament dental tape is shred-resistant.

36. (Previously Presented) The coated monofilament dental tape of claim 33,

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wherein the crystal control substance is selected from the group consisting of long chain fatty alcohols or mixtures thereof and liquid surfactants having the standard formula:



wherein R₁ to R₄ represent H or aliphatic acyl groups having from 10 to 30 carbon atoms and the sum of w, x, y, and z is from between about 20 and about 80.

37. (Previously Presented) The coated monofilament dental tape of claim 33, wherein the long chain fatty alcohol has the standard formula:



wherein R represents a long chain alkyl group having from 10 to 30 carbon atoms.

38. (Previously Presented) The coated monofilament dental tape of claim 33, wherein the at least one biologically active ingredient is selected from the group consisting of antimicrobial, anti-tartar, anti-plaque, whitening, cleaning, desensitizing, antibiotic, anti-inflammatory, anti-gingivitis ingredients, prostaglandin (PGE₂), and C-reactive protein control substances.

39. (Previously Presented) The coated monofilament dental tape of claim 38, wherein the antimicrobial substance is selected from the group consisting of chlorhexidine, cetylpyridinium chloride, domaphen bromide, triclosan, metronidazole,

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and mixtures thereof.

40. (Previously Presented) The coated monofilament dental tape of claim 33, wherein the coating further comprises a wax selected from the group consisting of paraffin waxes, microcrystalline waxes, petroleum waxes, and natural waxes.

41. (Previously Presented) The coated monofilament dental tape of claim 33, further comprising a sweetening agent.

42. (Previously Presented) The coated monofilament dental tape of claim 33, further comprising a flavoring agent.

43. (Previously Presented) The coated monofilament dental tape of claim 33, further comprising an abrasive agent.

44. (Previously Presented) The coated monofilament dental tape of claim 33, wherein the coating exhibits minimum cracking, fracturing, and flaking when physically removing biofilms from interproximal and subgingival surfaces.

45. (Previously Presented) The coated monofilament dental tape of claim 33, wherein at least one biologically active ingredient is releasable upon working into and physically removing biofilms from interproximal and subgingival spaces.

46. (Previously Presented) The coated monofilament dental tape of claim 33, wherein the coating is substantially crystal-free.

47. (Previously Presented) A method of manufacturing a coated

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monofilament dental tape having a substantive coating comprising at least one crystal control substance and an effective amount of at least one biologically active ingredient, wherein the coating is saliva-soluble and comprises between about 20% and about 120% by weight of the tape and has a flake value of less than about 20 and a release value of about 90 to 100, the method comprising the steps of:

- a. introducing the tape to a loading means containing the coating which is fluid and maintained substantially uniform, while being held at a temperature above the melting temperature of the coating;
- b. removing excess coating from the tape by doctoring or calendering the excess coating off the coated tape after coating, and
- c. cooling the coated tape and winding the same onto master spools prior to bobbin winding.

48. (Previously Presented) The method for treating interproximal and subgingival sites in the oral cavity with the coated monofilament dental tape according to claim 5, wherein the active ingredient is delivered interproximally and subgingivally upon flossing.

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